

Notice of Allowability

Application No.

10/822,618

Applicant(s)

DANG, LIEU-KIM

Examiner

Alicia M. Harrington

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 3/28/06 and interview 6/5/06.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 0606.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Alexander Zinchuk on 6/5/06.

3. The application has been amended as follows:

In the claims:

1. (Currently amended) A device for generating and projecting light marks, comprising a light source device for generating and radiating a primary light beam bundle, collimating optics for receiving the primary light beam bundle and for collimating, parallelizing and expanding the primary light beam bundle into a secondary light beam bundle and for radiating the secondary light beam bundle in a directed manner, and projection optics for receiving at least a portion of the secondary light beam bundle and converting the at least a portion of the secondary light beam bundle into at least one of a tertiary light beam bundle (L3) and marking beam bundle for at least one light mark and radiating and projecting the at least one light mark, wherein the projection optics is acted upon by the at least a portion of the secondary light beam bundle such that a central beam bundle of the secondary light beam bundle can be radiated through an area of the projection optics, at least one marginal beam bundle of the secondary light beam bundle adjacent to the central beam bundle of the secondary beam bundle can be radiated directly past an edge

or outer surface of the area of the projection optics, the central beam bundle of the secondary light beam bundle diffused through interaction with a cylindrical lens to ~~can~~ be projected substantially in a shape of a line as part of the tertiary light beam bundle (L3) or as a line mark beam bundle for a light mark, and the at least one marginal beam bundle (L2R) of the secondary light beam bundle can be projected substantially in one of a point and a spot as part of the tertiary light beam bundle or as a point mark bundle for a light mark .

13. (Currently amended) The device of claim 11, further comprising a circular diaphragm with a radius corresponding to approximately 4-times the radius of the cylindrical lens and approximately two-times the optical working diameter of the cylindrical lens, a rectangular diaphragm having a first edge that is perpendicular to the axis of symmetry of the cylindrical lens and corresponding to approximately 3-times the radius of the cylindrical lens and approximately 1.5-times the optical working diameter of the cylindrical lens and having a second edge that is parallel to the axis of symmetry of the cylindrical lens and is one of approximately 5-times the radius of the cylindrical lens and approximately 2.5-times the optical working diameter of the cylindrical lens.

Allowable Subject Matter

4. Claims 1-18 is allowed.

5. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, prior art fails to teach a device for generating and projecting light marks, comprising at least one marginal beam bundle of the secondary light


beam bundle adjacent to the central beam bundle of the secondary beam bundle can be radiated directly past an edge or outer surface of the area of the projection optics, the central beam bundle of the secondary light beam bundle diffused through interaction with a cylindrical lens to project in a shape of a line as part of the tertiary light beam bundle or as a line mark beam bundle for a light mark as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Harrington whose telephone number is 571 272 2330. The examiner can normally be reached on Monday - Thursday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571 272 2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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AMH